

Garrett County, Maryland

Digital Opportunity Plan

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Contents

AI	About this Digital Opportunity Plan1				
1	Exec	utive summary2			
2	Incre	easing digital access enables rural economic growth4			
	2.1	Digital opportunity drives economic growth and prosperity in the 21 st century			
3	Curr	ent state of digital opportunity in Garrett County7			
	3.1.2 3.1.3	ACP enrollment numbers show the challenge of connecting Garrett County residents to tive digital opportunity programs			
	3.2.1 3.2.2 one-(3.2.3 impro 3.2.4 unde 3.2.5	Garrett College provides digital skill-building and workforce training programs for all ages 12 The Ruth Enlow Library of Garrett County facilitates device lending, free Chromebooks, and on-one digital navigator assistance			
4	Barri	ers to digital opportunity in Garrett County15			
	4.1	Although universal broadband coverage is planned, it is not yet available everywhere			
	4.2 4.3 limited	The cost of broadband and devices limits access for some lower income residents			
	4.4 impact	The county would benefit from a coordinated effort to translate digital opportunity into economic 16			
5	Strat	egies to advance digital opportunity and economic growth in Garrett County			
	5.1 reality	Monitor construction and reduce friction to deployments to ensure planned networks become 17			
	5.2	Prioritize device access and adoption to maximize the benefits of connectivity			
	5.3 arc of re	Expand digital skill-building programs to ensure community members have access to a complete esources			
	5.4	Develop programming to maximize the economic value of the internet			

5.4.1	Expand remote work opportunities	20
5.4.2	Provide resources and mentorship for local entrepreneurs	20
5.4.3	Connect entrepreneurs with diverse funding opportunities	21

6	The Garrett County Broadband Division is best positioned to lead the county's efforts to create	
econ	omic impact through digital opportunity2	2

Figures

Tables

Table 1: Device access by household	7
Table 2: Internet access by household	8
Table 3: ACP enrollment	9

About this Digital Opportunity Plan

This Garrett County Digital Opportunity Plan (Plan) builds on the county government's existing Broadband Strategic Plan, released in May 2022,¹ and the ongoing efforts by the Department of Technology & Communications' Broadband Division to expand the availability of broadband infrastructure and services to reach all county residents.

This Plan represents a roadmap for Garrett County, Maryland's digital opportunity, fostering economic growth, education, health, and civic engagement. The county's vision is to bridge the digital divide within Garrett County, ensuring that every resident has access to digital resources. The guiding principles include access, inclusivity, affordability, education, and community collaboration.

All activities conducted in the development of this Plan have been guided by a subaward contract between the Garrett County Government and Connect Humanity, which received funding from an Appalachian Regional Commission (ARC) Appalachian Regional Initiative for Stronger Economies (ARISE) grant.

¹ CTC Technology & Energy, "Broadband Strategic Plan," Garrett County, May 2022, <u>https://www.garrettcountymd.gov/sites/default/files/2024-01/2022_Broadband_Plan_Garrett_Co_full.pdf</u>.

1 Executive summary

Garrett County's longstanding efforts to close the digital divide are paying off, with the county now on a path to complete coverage of broadband service. This is no small feat given that the county has some of the most challenging geography and lowest density of any county in Maryland.

Though there are some remaining actions that the Broadband Division must consider to ensure the infrastructure is built as planned and as promised, the task at hand is transitioning to ensuring the county's investments in broadband infrastructure achieve the maximum impact and economic return to the community. This Digital Opportunity Plan (Plan) sets the stage for Garrett County leaders, led by the Broadband Division, to do just that.

Research shows that higher broadband utilization rates in a community correlate with better economic outcomes in rural areas. In fact, controlling for other variables such as age, income, education level, ethnic and racial percentages, and other factors, communities with higher broadband utilization can see an increase in gross domestic product (GDP) of 44 percent year over year compared with low-utilization communities. This translates into an 18 percent growth rate in per capita income, or about \$500 per person per year in high-utilization communities.²

However, these figures are trends and correlations, not guarantees. The communities that achieve high levels of economic impact through broadband utilization do more than work to ensure high levels of internet adoption; they also establish programs and structures to help residents embrace the most impactful opportunities that the internet can provide, such as the ability to work remotely or to start and grow technology-based or technology-enabled businesses.

Garrett County has many impactful entities across the public and private sectors already providing services that are supporting greater internet adoption and digital opportunity, from Garrett College to the Ruth Enlow Library of Garrett County and senior services. This Plan documents a number of those existing activities and partners, whose efforts are critical to the county's continued progress in creating a community that thrives with its expanding internet access.

To provide clear direction on how the constellation of partners, led by the Broadband Division, can increase the economic impact of great broadband in the community, this Plan recommends actions to boost internet utilization, align partners and organizations around a shared vision, and establish programming. Some of these recommendations include:

- Develop a system to monitor the progress of ISPs that have committed to deploy in the county via data systems and regular check-ins
- Expand the Ruth Enlow Library system's laptop lending program, and work with employers, funders, and institutions to deploy more laptop and desktop devices

² Amanda Weinstein, May Erouart, Adam Dewbury, "Beyond Connectivity: The Role of Broadband in Rural Economic Growth and Resilience," Center on Rural Innovation, September 30, 2024, https://ruralinnovation.us/resources/reports/report-the-role-of-broadband-in-rural-economic-growth-and-resilience/.

- Take a survey of local employers to understand the biggest digital skills gaps among the Garrett County workforce
- Identify a full spectrum of digital skill-building resources for community members that ranges from internet basics to advanced concepts and workforce skills
- Cultivate greater participation in or access to remote jobs
- Develop programming to support entrepreneurs and the private sector to fund, grow, and scale businesses leveraging great internet
- Celebrate success stories showcasing residents' career transformations and achievement of life goals

Lastly, this Plan establishes that the Broadband Division is best positioned to lead this effort as a continuation of its work over the past decade. Digital opportunity in Garrett County requires an established leader that can drive narrative change in the community by helping everyone understand the new opportunities that better internet infrastructure can unlock. The Broadband Division has a successful track record of facilitating widespread coordination across public, private, and nonprofit entities; pursuing resources from a range of sources including state and federal grants; and tracking metrics and measuring progress. Most importantly, the Broadband Division is widely known and trusted throughout the community to be an effective advocate and changemaker in growing digital opportunity and economic impact.

2 Increasing digital access enables rural economic growth

In an economy where almost every company relies on digital tools and services in some form or another, broadband access is as essential to the prosperity of rural communities as roads and electricity. Without strong broadband infrastructure and the devices and knowledge to use it, rural people and rural businesses cannot reach their full potential.

This section explains how economic success in rural areas hinges on ubiquitous broadband access, intentional economic development, and digital connectivity programming.

2.1 Digital opportunity drives economic growth and prosperity in the 21st century

Research shows that broadband access is a key driver of economic growth in rural areas.³

A recent nationwide study about the impact of broadband in rural areas used a technique called "propensity score matching" to isolate broadband-related variables and reduce the impact of correlated variables, such as income, age, race, and other demographic information. This study found three factors that correlate with the greatest economic outcomes in rural areas:⁴

- Service from local internet service providers (ISP): Rural communities served by small, locally focused ISPs often experience tailored solutions that support economic growth.
- **High adoption rates:** Broadband adoption rates exceeding 80 percent are associated with gains in business growth and household incomes.
- **Fiber infrastructure:** Achieving adoption rates above 80 percent is very difficult without reliable, high-speed fiber coverage, and fiber brings the greatest economic and innovation opportunities to a community.

When these factors are present, compared with areas without these characteristics, communities can expect:

- Annual median income (AMI) approximately \$500 higher per resident
- Business growth rates more than double
- Gross domestic product (GDP) growth of up to 44 percent

These trends are further illustrated in the following figures, which show the correlation between broadband adoption rates and percent changes in both per capita income and GDP—reinforcing the economic potential of achieving high adoption levels.

³ Amanda Weinstein, May Erouart, Adam Dewbury, "Beyond Connectivity: The Role of Broadband in Rural Economic Growth and Resilience," Center on Rural Innovation, September 30, 2024, https://uralinnovation.us/resources/reports/re

https://ruralinnovation.us/resources/reports/report-the-role-of-broadband-in-rural-economic-growth-andresilience/.

⁴ Amanda Weinstein, May Erouart, Adam Dewbury, "Beyond Connectivity: The Role of Broadband in Rural Economic Growth and Resilience," Center on Rural Innovation, September 30, 2024,

https://ruralinnovation.us/resources/reports/report-the-role-of-broadband-in-rural-economic-growth-and-resilience/.

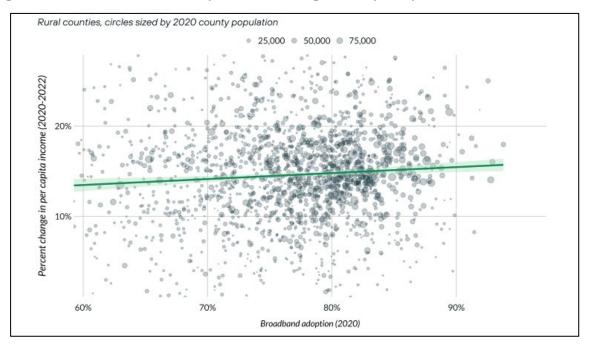


Figure 1: Increased broadband adoption is linked to growth in per capita income for rural counties



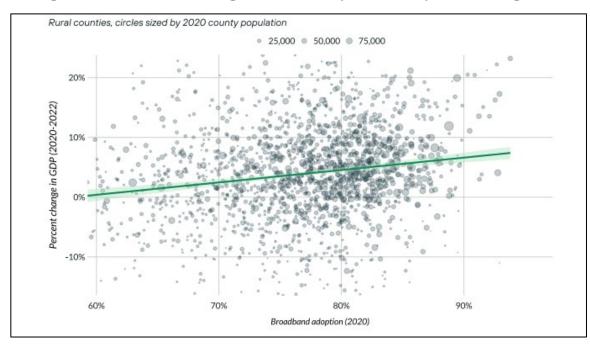


Figure 2: Rural counties with high broadband adoption rates experience GDP growth

Source: Center on Rural Innovation, Beyond Connectivity: The Role of Broadband in Rural Economic Growth and Resilience

However, as reflected in the charts above, these impacts are not achieved by every community that has high broadband utilization. Though better broadband adoption does correlate with better

economic outcomes, some communities with higher broadband utilization are not achieving their full economic potential, suggesting that even though digital adoption is high, the community would benefit from programs and structures to better translate great internet into economic progress.

Taken together, this shows that the path achieving the greatest economic impact for rural communities pursuing digital opportunity is twofold.

First, the community should work to increase internet utilization so that the whole community can access the benefits of great connectivity. This requires addressing as many structural barriers to adoption—such as lack of infrastructure, affordability challenges, device ownership, digital skill-building challenges, and more—as possible.

Second, communities should put into place programs that facilitate the types of economic advancement that are enabled by greater internet usage, such as programs that support people in starting or growing businesses, finding remote work, and gaining new skills. Ultimately, these programs will lead to individuals bringing more resources into the community, that then percolate through the local brick and mortar economy and support community prosperity as a whole.

3 Current state of digital opportunity in Garrett County

Garrett County has made extraordinary strides in establishing a clear path toward full broadband coverage—a monumental achievement that reflects more than 15 years of dedicated effort in a highly rural and difficult-to-serve region. However, as research has established,⁵ infrastructure deployments must be paired with programs to increase utilization and to cultivate economic growth. This section provides metrics to benchmark Garrett County's achievements in these areas to date.

3.1 County-level data show a solid internet utilization baseline yet clear room to grow

Garrett County's digital access landscape highlights key elements such as device availability, internet connectivity, and program enrollment, all of which are essential to consider when assessing digital opportunity in the region.

3.1.1 Device ownership rates are high, but residents disproportionately rely on mobile devices (like smartphones)

Device ownership in Garrett County is comparable to rural areas generally, with 88.3 percent of households having at least one type of computing device, comparable to 89.8 percent in rural areas nationally. However, 11.7 percent of households lack a desktop or laptop computing device, which is notably higher than the 4.7 percent in Maryland statewide. Importantly, 16.7 percent of residents rely solely on a smartphone or tablet to access the internet, which exceeds the statewide average by a significant margin.

Device access	Garrett County	Maryland	Rural	National
No computer	11.7%	4.7%	10.2%	6.0%
One or more computing device	88.3%	95.2%	89.8%	94.0%
Desktop or laptop	71.6%	84.2%	69.9%	79.3%
Only smartphone or tablet	16.7%	11.0%	19.9%	14.6%

Table 1: Device access by household

Disproportionate reliance on mobile-only devices may limit residents' ability to fully participate in the digital economy; certain tasks—such as applying for jobs, completing coursework, or running a business—are more effectively performed on desktop or laptop computers.

As Garrett County progresses toward universal home broadband coverage, ensuring greater access to devices as a whole—and, in particular, to desktops and laptops—will be a critical step in maximizing the benefits of infrastructure investments.

⁵ Amanda Weinstein, May Erouart, Adam Dewbury, "Beyond Connectivity: The Role of Broadband in Rural Economic Growth and Resilience," Center on Rural Innovation, September 30, 2024, https://ruralinnovation.us/resources/reports/report-the-role-of-broadband-in-rural-economic-growth-and-resilience/.

3.1.2 Garrett County has room to improve on internet adoption

Broadband access currently stands at 82.7 percent of households in Garrett County, which falls well short of Maryland's statewide average of 90.6 percent. This relatively low number is understandable given the fact that internet infrastructure has been lacking in the county for a long time, and significant effort has been required to find funding to deploy infrastructure.

Relatedly, only 54.8 percent of households use wired infrastructure (cable, fiber optic internet, or DSL), which is significantly below the Maryland average of 78.6 percent, again indicating infrastructure gaps in the county.

73.4 percent of households in Garrett County use cellular data and 17.9 percent rely solely on cellular connectivity. Approximately 13.9 percent of households lack internet access, which is double the Maryland state average.

Internet access	Garrett County	Maryland	Rural	National
Broadband of any type	82.7%	90.6%	81.8%	88.3%
Broadband such as cable, fiber optic, or DSL	54.8%	78.6%	59.4%	73.3%
Cellular data plan	73.4%	83.7%	71.8%	81.0%
Only a cellular data plan	17.9%	9.6%	14.8%	11.2%
Satellite internet service	10.1%	4.7%	9.8%	6.7%
Internet access without a subscription	3.0%	2.3%	2.9%	2.5%
No internet access	13.9%	7.0%	14.9%	9.0%

Table 2: Internet access by household

The county is actively working toward universal broadband coverage, and these data points represent a temporary snapshot of a community transitioning toward greater connections. As progress continues, county officials should monitor these metrics to ensure that dependence on less reliable forms of internet access diminishes over time.

3.1.3 ACP enrollment numbers show the challenge of connecting Garrett County residents to effective digital opportunity programs

The Affordable Connectivity Program (ACP) was a federal initiative that offered a \$30 monthly discount on internet service to eligible low-income households. In June 2024, funding for the

program expired,⁶ leaving many lower-income households without support in affording an internet connection.

However, even when the program was fully funded, enrollment by eligible households nationwide was low—and enrollment in the county lagged Maryland, rural, and national enrollment figures. As of February 2024, only 20.4 percent of eligible households in the county were enrolled in the ACP—well below the state average of 31.5 percent and the national rate of 42.1 percent.

	Garrett County	Maryland	Rural	National
Total eligible	8,395	576,902	9,867,569	45,217,014
Total enrolled	1,712	181,782	3,584,374	19,056,764
Percent enrolled	20.4%	31.5%	36.3%	42.1%

Table 3: ACP enrollment

This low enrollment rate is presented here as evidence that reaching residents with digital opportunity programs is challenging—nationwide, in Maryland, and in the county. Efforts to bolster digital opportunity in the county will not happen to a meaningful degree without ongoing, intentional effort from county leadership.

And while establishing an affordability initiative to replace the ACP would be very challenging at the county level, the county can focus on making its digital opportunity programs as effective and accessible as possible to ensure residents can fully benefit from broadband infrastructure improvements.

3.1.4 Economic indicators highlight Garrett County's digital workforce and entrepreneurial potential

Other keys to understanding the current state of digital opportunity in Garrett County—and where county leaders can devote concentrated effort to improving outcomes and growing the economy— can be found by looking at economic indicators that relate to how people are engaging with digitally enabled employment.

The following metrics also include comparisons with similar rural areas and federal data to allow county leaders to benchmark Garrett County against rural peers and in a national context. The comparison rural jurisdictions in the following charts are known as "noncore" rural counties, which is an Office of Management and Budget designation for counties like Garrett without a concentrated town of 10,000 people or more.⁷

⁶ Federal Communications Commission, "Affordable Connectivity Program," <u>https://www.fcc.gov/acp</u>.

⁷ United States Department of Agriculture Economic Research Service, "What Is Rural?" 2024, https://www.ers.usda.gov/topics/rural-economy-population/rural-classifications/what-isrural/#:~:text=Nonmetro%20counties%20are%20outside%20the%20boundaries%20of,part%20of%20%22c ore%2Dbased%22%20metro%20or%20micro%20areas (accessed November 21, 2024).

3.1.4.1 Remote work has grown faster in Garrett County than in peer counties

According to the American Community Survey, 9.9 percent of Garrett County residents state they work from home⁸—a notable increase from 5.7 percent in 2017, reflecting the growing acceptance of remote work across the country and impact of the COVID-19 pandemic. As highlighted in the chart below, these metrics align closely with the national trend (11.7 percent) and exceed the peer county average (6.9 percent).

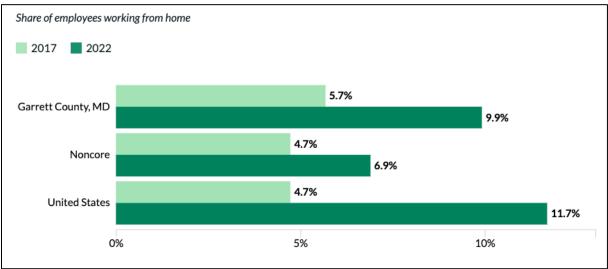


Figure 3: Remote workers in Garrett County, noncore rural communities, and the United States

Source: Center on Rural Innovation, Economic Development Tool

The disproportionate growth in remote workers is likely related to the amenities, tourism, and natural beauty in Garrett County, which makes it an attractive place to live and work. Whether new people are moving to the area with remote jobs, or existing residents are obtaining remote jobs, these jobs bring more wages and disposable income into the county, which in turn helps the local economy. Programs that encourage and support this segment of the workforce—which is a large and growing percentage—will only strengthen the economy and bring more resources into the county.

3.1.4.2 Sharp rise in business applications highlights strong entrepreneurial growth

As illustrated in the figure below, Garrett County has seen a remarkable increase in business applications, though new business starts have been fairly consistent, since 2015.

This pattern outpaces both the national average and the noncore county average, suggesting a rising culture of business creation and innovation in the county. While business applications do not equate to new business starts, almost 10 percent of Garrett County's businesses are less than five years old, which is slightly higher than the state average of 9 percent.⁹

 ⁸ United States Census Bureau, "Garrett County, Maryland: Employment," 2022, <u>https://data.census.gov/profile/Garrett_County, Maryland?g=050XX00US24023</u> (accessed June 28, 2024).
 ⁹ United States Census Bureau, "Data: Quarterly Workforce Indicators (QWI)," 2023,

https://www.bea.gov/data/employment (accessed June 28, 2024).

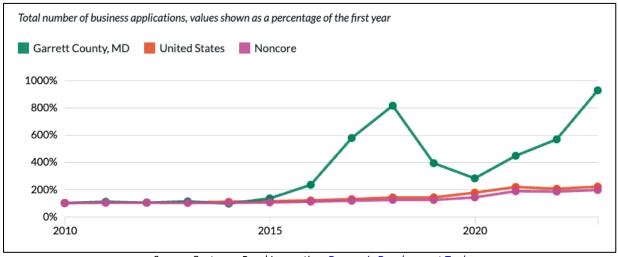


Figure 4: Business applications in Garrett County, noncore rural communities, and the United States

Source: Center on Rural Innovation, Economic Development Tool

This increase in business applications is an excellent sign that Garrett County is moving in the right direction economically. Most new employment comes from new firms, so the more business starts there are in the county, the more job growth is likely to occur shortly thereafter.

Entrepreneurs leveraging the full potential of internet connectivity help spur more economic growth. Tech- and internet-based companies allow businesses to export products and services digitally to anywhere in the globe and bring resources back into the county. When these companies are owned by Garrett County entrepreneurs, this leads to greater wealth building in the community—and more resources that then cycle through the local economy.

3.1.4.3 High self-employment rates reflect a strong community of entrepreneurs

Garrett County exhibits a slightly higher-than-average rate of self-employment compared to noncore counties and the national average. The graph below shows that 26 percent of Garrett's workforce is self-employed, compared to 25.7 percent in noncore counties and 24.8 percent nationally.

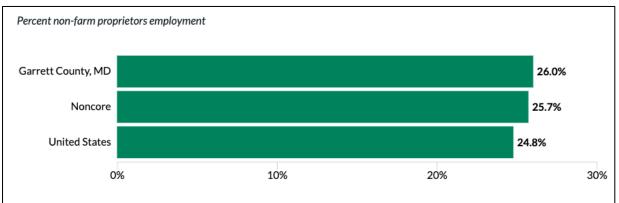


Figure 5: Self-employment in Garrett County, noncore rural communities, and the United States

Source: Center on Rural Innovation, Economic Development Tool

As in any jurisdiction, some of these individuals may be self-employed out of necessity (in other words, they may have lost their job and then were forced to start a business). However, many will be opportunity-seeking entrepreneurs who started a business seeking financial gains. Again, these entrepreneurs can bring significant wealth into the county if their businesses can leverage the internet to export value and import cash. The more entrepreneurs the county can support, help to grow, and convince to stay in the county (rather than moving to the nearest city), the more the county will benefit.

3.2 Garrett County's community partners are dedicated to expanding digital opportunities

Garrett County's efforts to expand digital opportunity are supported by a strong network of local institutions working hard to increase internet adoption and build digital skills within the community. Schools, public libraries, and social service organizations are collaborating to address the county's challenges and provide residents with the tools they need to fully benefit from improved connectivity.

This section describes the current landscape of digital opportunity practitioners and partners, which lays the foundation for greater advancements in digital opportunity in Garrett County over the coming years.

3.2.1 Garrett College provides digital skill-building and workforce training programs for all ages

Garrett College plays a central role in expanding digital skills within the community, particularly through workforce development and industry-aligned training programs. Key among these is a cybersecurity degree funded by a U.S. Department of Labor Trade Adjustment Assistance Community College and Career Training (TAACCCT) grant,¹⁰ along with information technology and cybersecurity¹¹ certification bootcamps that provide a pathway into digital professions. Although enrollment in tech programs is relatively modest, according to stakeholders, the college is prepared to expand its offerings to meet the community's evolving digital needs.

Garrett College also promotes entrepreneurship and economic engagement through its Business Solutions Department, ¹² which runs a hybrid entrepreneurship class culminating in a pitch competition. Additionally, a small business incubator supports local entrepreneurs, including remote-working government contractors. These offerings reflect Garrett County's growing openness to digital and remote work opportunities, especially as new residents seek to leverage local business prospects in the county's four-season tourism economy.

Another program available through the college is the Garrett Institute for Lifelong Learning, a membership-driven program aimed at residents 55 years of age and older. This program offers

¹⁰ "Trade Adjustment Assistance Community College and Career Training," U.S. Department of Labor, <u>https://www.dol.gov/agencies/eta/skills-training-grants/community-colleges</u>.

¹¹ "Cybersecurity Certificate," Garrett College, <u>https://www.garrettcollege.edu/certificate-cybersecurity.php</u>.

¹² "Business Solutions," Garrett College, <u>https://www.garrettcollege.edu/cewd-business-solutions.php</u>.

community-focused courses that empower older adults to stay engaged and adapt to evolving digital tools.

Through digital skills programs and business support initiatives, Garrett College is well-positioned to enhance digital skill-building and allow more residents to take advantage of digital opportunities and careers.

3.2.2 The Ruth Enlow Library of Garrett County facilitates device lending, free Chromebooks, and one-on-one digital navigator assistance

The five branches of the Ruth Enlow Library of Garrett County¹³ support digital opportunity by providing essential resources like Chromebooks and mobile hotspots for qualifying low-income residents, helping bridge connectivity gaps for personal and professional needs. Through the Connected Devices (Chromebook) Program, income-eligible families can receive one free Chromebook per household by completing a simple application form, available at participating library branches. ¹⁴ This initiative directly addresses the need for affordable digital devices, expanding access to essential online resources for low-income individuals and families throughout the county. Chromebooks are available until the end of the grant period on December 31, 2024, or until all devices are distributed, though an extension of the grant period may be possible.

However, residents cannot take full advantage of this opportunity without the knowledge necessary to use the devices. This type of training and technical support is most effective when provided in a one-on-one setting and fully tailored to an individual's needs. These programs are often called "digital navigator" programs; digital navigators are traditionally community members trained and available to help people overcome a range of adoption barriers.

The Ruth Enlow Library offers hands-on digital support through one-on-one technical assistance, helping residents with tasks like managing emails, printing, using public computers, and more. The library system recognizes a demand for digital learning, particularly among seniors who need fundamental technical skills and who may benefit from increased digital confidence.

3.2.3 Outreach and senior services provided by the Garrett County Community Action Committee improve the digital confidence of older Garrett County residents

The senior centers in Garrett County¹⁵—particularly the Mary Browning Senior Center in Oakland and the Grantsville Senior Center—serve as natural, accessible gathering locations for older residents. Interviews with local stakeholders conducted in the preparation of this Plan indicated that the centers could play an essential role in helping seniors develop digital skills, as there is demand for more one-on-one digital training than current resources can support.

chromebook-program (accessed December 4, 2024).

¹³ Ruth Enlow Library of Garrett County, <u>https://www.relib.net/</u>.

¹⁴ Connected devices Chromebook program, Garrett County Government, <u>https://www.garrettcountymd.gov/technology-communications/broadband/connected-devices-</u>

¹⁵ Garrett County Community Action Committee Inc., Area Agency on Aging & Nutrition, <u>https://garrettcac.org/senior-services/</u>.

Feedback from community representatives highlighted the unique connectivity needs of seniors, especially in areas like internet safety, online banking, and social connectivity. While the Ruth Enlow Library system and other community organizations offer some digital education programs, interviewees observed that resource limitations and staffing shortages make it challenging to meet the growing demand for these services across various demographic groups, including seniors.

3.2.4 Garrett Community Action Committee supports digital skill-building and internet adoption for underserved populations

The Garrett Community Action Committee supports connectivity in low-income housing complexes where community rooms offer internet access (while most individual housing units do not).

Stakeholders report that although laptops have been distributed to residents, residents would benefit from greater digital skill-building to facilitate more complete usage of laptops and other devices.

To support residents, the Committee hosts weekly engagement sessions designed around their needs. These sessions feature guest speakers, crafts, and discussions on relevant topics, including Adult Protective Services, Medicare, and Meals on Wheels, providing residents with valuable information and direct connections to resources that support their well-being and daily needs.

3.2.5 Garrett County's organizations and institutions have built a great foundation for increased digital opportunity work

Garrett County has a strong constellation of organizations and institutions working to enhance internet access and skills. Key players—including Garrett College, the Ruth Enlow Library system, the senior centers, and the Garrett Community Action Committee—contribute targeted resources, training, and support tailored to meet the digital needs of various demographics, from students and entrepreneurs to seniors and low-income residents.

This collaborative approach demonstrates a robust commitment to digital opportunity. Leveraging the inherent knowledge, passion, and connections that exist through these organizations will be the most effective way to boost digital confidence, access, and economic engagement for all residents of Garrett County.

4 Barriers to digital opportunity in Garrett County

Garrett County faces challenges in fostering digital inclusion, with barriers impacting low-income households, older adults, and communities that lack sufficient resources to advance digital opportunities. These barriers, discussed below, limit residents' ability to fully engage in the digital economy, access essential services, and improve their quality of life.

4.1 Although universal broadband coverage is planned, it is not yet available everywhere

While Garrett County has done an incredible job in facilitating the partnerships and funding required to serve everyone in the community, the job of deploying infrastructure is not over until the very last mile is built.

The local public sector has a role to play in ensuring that ISPs that have committed to building infrastructure (whether via partnership agreements, press releases, contracts, grant awards, or just handshake agreements) fulfill their obligations.

Tracking and facilitating expansions and enforceable commitments is complicated by the myriad state and federal funding programs, such as the Broadband Equity, Access, and Deployment (BEAD) Program¹⁶ and Connect Maryland's Home Stretch for Public Housing (HS-PH),¹⁷ which each have their own requirements and timelines.

In recent years, a major federal program—the Rural Digital Opportunity Fund program—has seen a spate of defaults from award winners, meaning that areas once considered on the path to being served no longer have committed partners to deploy. While this situation has not occurred in Garrett County, it has in hundreds of other rural districts, which presents a cautionary tale about treating a planned expansion as though it were already built.

4.2 The cost of broadband and devices limits access for some lower income residents

Affordability remains a significant barrier to digital access in Garrett County. Low-income households often struggle to cover the costs associated with broadband subscriptions, computing devices, and necessary technical support.

As discussed in the Statewide Digital Equity Plan, these expenses disproportionately affect lowerincome families in Maryland, preventing many residents from accessing essential online resources, including education, healthcare, job opportunities, and government services.¹⁸ Among Maryland

https://dhcd.maryland.gov/Broadband/Documents/HS-PH/FY24-Application-Package.pdf.

¹⁶ National Telecommunications and Information Administration, "Broadband Equity Access and Deployment Program." BroadbandUSA, <u>https://broadbandusa.ntia.doc.gov/funding-programs/broadband-equity-access-and-deployment-bead-program</u> (accessed November 14, 2024).

¹⁷ Maryland Department of Housing and Community Development, "Connect Maryland: FY24 Home Stretch for Public Housing Grant Program," Office of Statewide Broadband, October 12, 2023,

¹⁸ Maryland Department of Housing and Community Development, "Connect Maryland: FY24 Home Stretch for Public Housing Grant Program," Office of Statewide Broadband, October 12, 2023, <u>https://dhcd.maryland.gov/Broadband/Documents/HS-PH/FY24-Application-Package.pdf</u>.

households without home internet, approximately 12 percent report that the primary reason for not using the internet at home is the inability to afford the service.¹⁹

In Garrett County, the high reliance on mobile devices only for internet access—highlighted in earlier data showing that 16.7 percent of households rely solely on smartphones or tablets—may also be a byproduct of the expense of purchasing and maintaining desktop or laptop computers.

4.3 Low-income households, people with disabilities, and aging residents are more likely to have limited digital skills

As evidenced by stakeholders, a considerable portion of Garrett County's low-income and aging populations as well as residents with disabilities lack the digital skills needed to navigate the online world safely and effectively.²⁰ This gap hinders their ability to access vital services, pursue job opportunities, connect with loved ones, and protect their personal information, leaving them more exposed to cybercrimes and privacy breaches.

Closing this digital skills gap will empower these residents to participate confidently and securely in a digital society, ensuring they are not left behind and can take full advantage of the opportunities that digital access provides.

4.4 The county would benefit from a coordinated effort to translate digital opportunity into economic impact

While Garrett County has made strides in addressing digital literacy needs through existing programs, and those entities understand what more they could do with greater resources, there is currently no unified strategy to translate digital connectivity into significant economic development outcomes. Programs remain focused on essential discrete needs rather than building a broader framework that links connectivity to long-term economic growth.

To fully capitalize on the economic benefits of broadband access, the county could develop complementary initiatives that support job seekers, expand remote work opportunities, foster entrepreneurs and business starts, and equip residents with digital skills aligned to modern job markets. These efforts would help bridge the gap between digital access and economic impact, ensuring connectivity becomes a driver of prosperity for the community.

By adopting a more coordinated approach, Garrett County can enhance its digital inclusion programs and better align them with the goal of fostering sustained economic growth and opportunity for all residents.

¹⁹ Maryland Department of Housing and Community Development, "Statewide Digital Equity Plan," State of Maryland, March 2024, <u>https://dhcd.maryland.gov/Broadband/Documents/State-Plans/Final-Maryland-Digital-Equity-Plan.pdf</u>.

²⁰ Maryland Department of Housing and Community Development, "Statewide Digital Equity Plan," State of Maryland, March 2024, <u>https://dhcd.maryland.gov/Broadband/Documents/State-Plans/Final-Maryland-Digital-Equity-Plan.pdf</u>.

5 Strategies to advance digital opportunity and economic growth in Garrett County

The recommendations that follow are designed to be achievable by the county and to make a tangible, measurable impact. They align with the goals stated in the county's comprehensive plan to educate citizens about the benefits of broadband, provide access to necessary equipment, and empower residents to use the technology effectively.²¹

By building on the data, gaps, and barriers identified earlier, these strategies aim to create a strong foundation for digital inclusion while maximizing the economic value of broadband connectivity.

5.1 Monitor construction and reduce friction to deployments to ensure planned networks become reality

Ensuring that broadband infrastructure is expanded as planned is a critical foundational step. To achieve the most favorable community outcomes possible, public sector officials need to stay engaged and vigilant through all the overlapping broadband grant and deployment programs. The federal government is not necessarily able to step in to tell an ISP that they missed an enforceable commitment— but the Broadband Division, which has long been engaged in this type of work, is well-positioned to do this.

From monitoring deployments, facilitating permitting, resolving easement issues, looking for opportunities for cost savings, and being a point of contact between the public and private sector, there is plenty for the Broadband Division to do. Just holding construction companies accountable for repairing lawns adequately after construction is a major undertaking—and ensuring proper restoration of public and private property after construction is a best practice for public sector broadband projects.

Recommended actions:

- Use the FCC's enforceable commitment map—ideally downloaded locally and merged with local parcel data—to maintain GIS records of where construction should be happening and by whom
- Set up monthly meetings with broadband builders in the community to review progress, make public sector officials aware of where construction will happen next, and troubleshoot issues
- Ensure that new construction in the community is communicated to broadband builders and ISPs so they can plan for deployment
- Provide information to residents about construction plans, road disruptions, and resources in case residents have questions or concerns about ongoing work

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https://www.garrettcountymd.gov/sites/default/files/Comprehensive%20Plan-
Adopted%20Nov%202022.pdf.
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²¹ Garrett County Planning and Land Management, "Garrett County Comprehensive Plan," Garrett County, Maryland, November 22, 2022, https://www.gorrettooupt.md.gov/aitoo/dofault/files/Comprehensive%20Plan

5.2 Prioritize device access and adoption to maximize the benefits of connectivity

As home internet becomes increasingly available across Garrett County, the digital opportunity focus should shift toward prioritizing device usage and adoption to maximize the benefits of broadband connectivity. Many residents (16.7 percent) still rely solely on mobile devices, limiting their ability to fully engage in opportunities that often require desktop or laptop computers.

Expanding programs like the library's Connected Devices (Chromebook) Program²² should be a primary focus. Efforts could include raising awareness about the program, extending the grant period, increasing the inventory of available devices, and offering repair services for broken equipment.

By addressing this barrier to adoption, Garrett County can provide residents with the proper devices to make the most of improved broadband access.

Recommended actions:

- Help publicize and grow the Connected Devices Program
 - Seek additional grant funding to provide refurbished or new Chromebooks or laptops to residents in need
- Form partnerships with local businesses who may be interested in donating older devices to community members
- Celebrate stories demonstrating how Garrett County residents were able to achieve career or life goals through device acquisition

5.3 Expand digital skill-building programs to ensure community members have access to a complete arc of resources

Garrett County should think about digital skill-building on an intentional continuum. Not everyone will need to start with the basics, and not everyone will be interested in the full progression; however, it is useful to imagine a full user journey from basic to advanced skills to understand what resources are available and easily accessible in the community, and what are not.

In a simple form, that user journey could encompass the following categories, with example topics in each:

• Building basic digital skills

- Navigating the internet, using email effectively
- o Entertainment, videoconferencing, and finding information
- Expanding digital skills safely and confidently
 - Online banking, telehealth, and accessing government services

²² "Connected Devices (Chromebook) Program," Garrett County Government, Broadband Division, <u>https://www.garrettcountymd.gov/technology-communications/broadband/connected-devices-</u> <u>chromebook-program</u>.

- Cybersecurity and scam prevention staying safe online
- Building a LinkedIn profile and job searching online

• Leveling up at work

- Microsoft Office suite
- Social media marketing basics
- Building a website using a drag and drop website service
- Basics of AI and prompt engineering

• Building advanced skills and cutting-edge technologies

- o Software certifications
- Coding bootcamps
- Advanced video and photoshop skills
- Advanced Al uses
 - Al prompt engineering
 - o AI research applications

To support this continuum, the University of Maryland Extension's "Marylanders Online" program provides Maryland residents with an array of digital skill-building resources.²³ The program offers clear and accessible instructions on using computers, phones, and tablets, as well as guidance on online communication, job searching, online education, accessing government services, and more.

For individuals without a device or internet connection, the program also includes a call center with a toll-free number to provide personalized assistance. These resources can complement local initiatives by helping individuals enhance their digital skills remotely and at their own pace.

While online resources like "Marylanders Online" are valuable, basic and introductory courses are most effective when delivered in person within the community. For more advanced skills, virtual learning becomes increasingly accessible and practical as individuals build confidence and foundational knowledge.

However, it is often the case that open classes are not as effective in rural areas as digital navigators that can work one-on-one with people on the specific challenges and needs they have. Deepening this practice in the community will continue to be beneficial.

Recommended actions:

• Inventory the digital skilling opportunities in the county, and plot along a user journey from beginning to advanced

²³ University of Maryland Extension. *Marylanders online*. Retrieved December 2, 2024, from <u>https://marylandersonline.umd.edu</u>.

- Develop or solicit programs that fill gaps in the user journey
- Survey local businesses to understand what digital skills are most lacking amongst staff and potential employees, and ensure training is developed to address those gaps
- Align and coordinate partners and digital navigators offering elements along the continuum
- Publicize opportunities and celebrate success stories

5.4 Develop programming to maximize the economic value of the internet

To fully leverage broadband access, Garrett County should implement targeted programs that translate connectivity into tangible economic growth. By focusing on support for remote work, entrepreneurship, and access to funding, the county can create pathways for residents and businesses to participate in the digital economy.

5.4.1 Expand remote work opportunities

Expanding remote work opportunities can help Garrett County residents tap into higher-paying jobs without relocating. The county can implement targeted initiatives to support residents in securing and succeeding in remote roles and create infrastructure to foster collaboration and innovation among remote workers. Possible actions include:

- Offer programs to help residents find and excel in remote jobs, teaching skills such as managing remote work environments, using virtual collaboration tools, and navigating online job markets.
- Conduct a survey of regional businesses to identify their current and future technology and staffing needs. Use this data to align workforce training programs with employer demand, ensuring residents are prepared for local and remote job opportunities.
- Explore the potential to repurpose an unused space into coworking hubs for remote workers. These spaces could also host community workshops, mentoring programs, social meetups, and other events, creating a vibrant environment for collaboration and professional growth.
- Identify residents already working remotely and convene focus groups to understand their needs and challenges. Insights from these discussions can inform targeted support services and programming to better meet the needs of this growing workforce.

5.4.2 Provide resources and mentorship for local entrepreneurs

Providing resources and mentorship for local entrepreneurs, particularly during the critical early years of operation, can help build a thriving ecosystem for innovation and business success. Possible actions include:

• Collaborate with Garrett College to establish entrepreneurship programming aligned with its degree offerings and identify professors or community leaders with business experience—especially in technology—as mentors.

- Develop a formal mentor network to facilitate connections between local startups and technologists or investors from the region. Networking events can provide founders with valuable expertise and access to potential funding sources.
- Host events where aspiring entrepreneurs can present ideas to gather feedback, find collaborators, and refine their concepts.

5.4.3 Connect entrepreneurs with diverse funding opportunities

By connecting entrepreneurs with diverse funding opportunities and fostering relationships with financial institutions, the county can create an environment where businesses have the resources they need to launch and grow. Possible actions include:

- Identify and cultivate relationships with potential investors who have ties to the region, bringing credibility to Garrett County's entrepreneurial landscape and attracting more funding opportunities.
- Work with local banks like M&T Bank or First Peoples Community Federal Credit Union, as well as community development financial institutions and organizations offering revolving loan funds to provide entrepreneurs with accessible funding options.
- Strengthen connections with organizations such as the Appalachian Investors Alliance and Garrett County's own grant programs, like the Small Business Marketing Grant.
- Provide support to small businesses and entrepreneurs applying for grants, such as those offered through the Maryland Technology Development Corporation. Even informal grant-writing assistance can make a significant difference in helping startups secure necessary funding.

By integrating these strategies, Garrett County can reduce financial barriers for new and growing businesses, enabling a more dynamic and sustainable entrepreneurial ecosystem.

6 The Garrett County Broadband Division is best positioned to lead the county's efforts to create economic impact through digital opportunity

As evidenced by the research described in previous sections,²⁴ broadband access alone does not automatically generate widespread economic impact. For Garrett County to fully benefit from its broadband investments and its ongoing commitment to promoting the expansion of broadband infrastructure and services,, the public sector must take the lead in driving efforts to translate connectivity into tangible outcomes.

The Garrett County Government Department of Technology & Communications' Broadband Division is well positioned to fulfill this role. In fact, there are several functions critical to the county's success in this arena that the Broadband Division is uniquely able to execute:

- **Coordinating across public, private, and nonprofit sectors.** Just as digital connectivity touches all aspects of life, digital opportunity touches all aspects of the community. The Broadband Division sits at the center of it all, and their strong connections to the range of stakeholders needed to do this work right—including ISPs, community anchor institutions, educational institutions, nonprofits, and community members—is an irreplaceable asset.
- Securing resources. The Broadband Division has proven adept at securing resources for infrastructure deployment and coordinating work in that arena. Similarly, digital opportunity work requires resources to do it well and do it right. Not only can the Broadband Division bring in resources, it sits in a key central position that enables it to understand where the greatest needs are, where the biggest gaps are, and what to prioritize for the greatest impact.
- **Facilitating trust.** Participation in these programs requires building and maintaining trust. Whether it is trusting ISPs that are asking people to sign up for affordability programs, or trusting training resource providers delivering guidance on scam avoidance or AI, community members will have greater trust if local public sector leaders who have delivered results for decades are at the helm.
- **Changing narratives and leading culture change.** Embracing digital opportunity to facilitate economic development and grow local prosperity is not intuitive for everyone. It can seem like a new way of doing business. A steady and persistent advocate that knows the community but also knows what is possible with aspirational thinking is the best type of leader to help a community grow in new ways.
- **Tracking progress and impact.** A centralized, public sector leader is best positioned to track progress, understand the impact of the programs, and lead innovation and iteration to improve effectiveness.

²⁴ Amanda Weinstein, May Erouart, Adam Dewbury, "Beyond Connectivity: The Role of Broadband in Rural Economic Growth and Resilience," Center on Rural Innovation, September 30, 2024, https://ruralinnovation.us/resources/reports/report-the-role-of-broadband-in-rural-economic-growth-and-resilience/.

The rapidly expanding broadband infrastructure throughout the county is a hard-fought and wellearned victory that has already created ambient economic and quality-of-life value for the community. Intentional efforts to promote digital opportunity and economic development are needed to take the ambient benefits and create deep, lasting impact.